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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/828,751

Applicant(s)

PRICE ET AL.

Examiner

Jennifer L. Norton

Art Unit

2121

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 October 2008.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 9-20 and 25 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-6, 9-20 and 25 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 01 August 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/808)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

1. The following is a **Final Office Action** in response to the Amendment received on 07 October 2008. Claims 7, 8, 21-24 and 26-28 were previously cancelled. Claims 1-6, 9-20 and 25 are pending in this application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-6, 9-11, 20 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Publication No. 2003/0150909 (hereinafter Markham) in view of U.S. Patent No. 6,421,571 (hereinafter Spriggs) in further view of U.S. Patent No. 6,524,230 (hereinafter Harding).

4. As per claim 1, Markham teaches a method of monitoring and controlling a manufacturing process to enable at least one manufactured product to meet at least one specification, the method comprising the steps of:

providing at least one key process indicator (KPI) dashboard (pg. 4, par.

[0049]) with a statistical process control (SPC) subsystem (pg. 9, par. [0116]), pg. 20, par. [0206] and pgs. 23-24, par. [0228]) for at least one manufacturing sub-process (pg. 2, par. [0035]);

automatically collecting product specific data (pg. 1, par. [0012] and pg. 7, par. [0083]) from the manufacturing sub-process (pgs. 21-22, par. [0212]) through at least one data collecting apparatus (pgs. 19-20, par. [0200] and Fig. 1, element 58);

storing said product specific data in at least one database (pg. 3, par. [0039], pg. 20, par. [0201] and Fig. 2, element 70);

setting at least one specification for the at least one product and the at least one manufacturing sub-process (pg. 17, par. [0183]);

accessing the at least one database with the KPI dashboard (pg. 2, par. [0035], pg. 3, par. [0039], pg. 11, par. [0133] and pgs. 19-20, par. [0200]);

setting at least one alarm (pg. 5, par. [0058] and pg. 6, par. [0064]) for the at least one product and the at least one manufacturing sub-process (pg. 8, par. [0008] and pgs. 30-31, par. [0280]); and

comparing the product specific data with the at least one alarm (pg. 5, par. [0058] and pgs. 5-6, par. [0062] and [0064]) and/or the at least one specification (pg. 5, par. [0059]) and notifying at least one user when the product specific data triggers the at least one alarm and/or the at least one specification (pg. 5, par. [0060], pg. 6, par. [0064], pgs. 19-20, par. [0200] and [0203] and pgs. 30-31, par. [0280]).

Markham teaches to a method substantially the same as claimed but does not expressly teach to notifying at least one user in real time when the product specific data triggers the at least one alarm and/or the at least one specification (pg. 20, par. [0206] and pgs. 23-24, par. [0206] and [0208]); and the product specific data is automatically collected and stored at regular time intervals.

Spriggs teaches to notifying at least one user in real time (col. 9, lines 14-21) when data triggers the at least one alarm and/or the at least one specification (col. 10, lines 23-49 and col. 11, lines 1-12).

Spriggs does not expressly teach data is automatically collected and stored at regular time intervals.

Harding teaches data is automatically collected and stored at regular time intervals (col. 25, lines 52-60).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Markham to include notifying at least one user in real time when data triggers the at least one alarm and/or the at least one specification to reduce operating costs, provide fewer and less severe failures and better production availability (Spriggs: col. 1, lines 35-46 and col. 2, lines 27-38); and data is automatically collected and stored at regular time intervals for the

advantage of collecting and storing diagnostic information to perform enhanced and automated manufacturing functions (Harding: col. 2, lines 25-28).

5. As per claim 2, Markham teaches as set forth above collecting and storing product specific data steps comprise automatically collecting and storing first product specific data in the at least one database (pg. 7, par. [0083], pg. 9, par. [0116], pg. 16, par. [0175] and pg. 20, par. [0206]) and manually collecting and storing at least one piece of second product specific data in the same at least one database (pgs. 6-7, par. [0077] and pg. 9, par. [0119]).

6. As per claim 3, Markham teaches as set forth the step of storing product identifying data (pg. 17, par. [0183]) and manufacturing plant specific data (pg. 17, par. [0178]) together in the at least one database (pg. 20, par. [0201] and pg. 26, par. [0244] and [0245]).

7. As per claim 4, Markham teaches as set forth the step of allowing the user to select at least one manufacturing sub-process through the KPI dashboard (pgs. 26-27, par. [0251]).

8. As per claim 5, Markham teaches as set forth automatically collecting (pg. 8, par. [0096], pg. 9, par. [0116], pg. 20-21, par. [0206]-[0207] and pg. 23-24, par. [0226]

and [0228]) and storing the product specific data steps comprise collecting and storing at least one measure specific to the at least one selected manufacturing sub-process that enables the manufactured product to meet the at least one specification (pg. 26, par. [0245]).

9. As per claim 6, Markham teaches the setting of the at least specification step comprises setting at least one specification for the at least one measure (pg. 17, par. [0183]) and the setting of the at least one alarm step (pg. 5, par. [0058] and pg. 6, par. [0064]).

Markham does not expressly teach setting a range of specifications and alarms for the measure.

Spriggs teaches to setting a range of specifications and alarms for the measure (col. 10, lines 1-2 and 22-30).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Markham to include setting a range of specifications and alarms for the measure to reduce operating costs, provide fewer and less severe failures and better production availability (col. 1, lines 35-46 and col. 2, lines 27-38).

10. As per claim 9, Markham teaches as set forth above the step of entering

into the at least one database a reason for the collected measure falling outside of the at least one range of alarms and/or specifications (pg. 8, par. [0093], [0096] and [0102] and pg. 9, par. [0119]).

11. As per claim 10, Markham teaches as set forth above the step of entering a corrective action into the at least one database, which was taken to prevent the at least one measure from falling outside of the at least one range of alarms and/or specifications (pg. 9, par. [0119]).

12. As per claim 11, Markham teaches as set forth the step of generating at least one report based on the product specific data stored in the at least one database (pgs. 26-27, par [0251]-[0253]).

13. As per claim 20, Markham teaches a method of allowing a user to access a plant management database and configure and manipulate the data stored therein, the method comprising:

providing at least one piece of manufacturing equipment capable of producing at least one product (pg. 23, par. [0227]);

collecting automatically a first product specific data (pg. 1, par. [0012] and pg. 7, par. [0083], pg. 9, par. [0116], pg. 20-21, par. [0206]-[0207] and pg. 23-24, par.

[0226] and [0228]) from the at least one piece of manufacturing equipment (pg. 7, par. [0083], pg. 9, par. [0116], pg. 16, par. [0175] and pg. 20, par. [0206]);

entering manually second product specific data for the at least one product produced from the manufacturing equipment (pgs. 6-7, par. [0077] and pg. 9, par. [0119]);

setting at least one of specification (pg. 17, par. [0183]) and at least one alarm for the at least one product (pg. 5, par. [0058] and pg. 6, par. [0064]); and

storing the first product data, the second product specific data, the at least one specifications, and the at least one alarm together in the same at least one database (pg. 20, par. [0201] and pg. 26, par. [0244] and [0245]), and

comparing the first product specific data with the second product specific data to the at least alarm (pg. 5, par. [0058] and pgs. 5-6, par. [0062] and [0064]) and/or the at least one specification (pg. 5, par. [0059]) and notifying at least one user when the first product specific data and/or the second specific product data falls outside of the at least alarm and/or the at least one specification setting (pg. 6, par. [0064], pgs. 19-20, par. [0200] and [0203] and pgs. 30-31, par. [0280]).

Markham teaches to a method substantially the same as claimed but does not expressly teach notifying at least one user in real time when the first product specific data and/or the second specific product data falls outside of the at least alarm and/or the at least one specification setting (pg. 20, par. [0206] and pgs. 23-24, par. [0206]

and [0208]), the first product specific data is automatically collected and stored at regular time intervals, and setting a range of alarms and/or specifications.

Spriggs teaches to setting a range of alarms and/or specifications (col. 10, lines 1-2 and 22-30); and notifying at least one user in real time (col. 9, lines 14-21) when data triggers the at least one alarm and/or the at least one specification (col. 10, lines 23-49 and col. 11, lines 1-12).

Spriggs does not expressly teach the first product specific data is automatically collected and stored at regular time intervals.

Harding teaches data is automatically collected and stored at regular time intervals (col. 25, lines 52-60).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Markham to include to setting a range of alarms and/or specifications; and notifying at least one user in real time when data triggers the at least one alarm and/or the at least one specification to reduce operating costs, provide fewer and less severe failures and better production availability (Spriggs: col. 1, lines 35-46 and col. 2, lines 27-38); and data is automatically collected and stored at regular time intervals for the advantage of collecting and storing diagnostic information to perform enhanced and automated manufacturing functions (Harding: col. 2, lines 25-28).

14. As per claim 25, Markham teaches as set forth above the step of generating at least one report based on the first product specific data and/or the second product specific data stored in the at least one database (pgs. 26-27, par. [0251]-[0253]).

15. Claims 12-14, 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Markham in view of Harding.

16. As per claim 12, Markham teaches a method of monitoring at least one manufacturing process for at least one manufacturing plant, the method comprising the steps of:

entering product identifying data for at least one product into a first data entry field (pg. 17, par. [0183]);

entering manufacturing plant specific data into a second data entry field (pg. 17, par. [0178] and [0179]);

assigning at least one data collecting apparatus to at least one manufacturing sub-process that produces the at least one product (pg. 17, par. [0183]);

automatically collecting first product specific data (pg. 1, par. [0012] and pg. 7, par. [0083]) with the at least one collecting data apparatus (pgs. 19-20, par. [0200] and Fig. 1, element 58) from the at least one manufacturing sub-process (pgs. 21-22, par. [0212]); and

storing the product identifying data, the plant specific data and the first product

specific data together in at least one database (pg 3, par. [0039], pg. 20, par. [0201], pg. 26, par. [0244] and [0245] and Fig. 2, element 70).

Markham does not expressly teach wherein the first product specific data is automatically collected and stored at regular time intervals

Harding teaches data is automatically collected and stored at regular time intervals (col. 25, lines 52-60).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Markham to include data is automatically collected and stored at regular time intervals for the advantage of collecting and storing diagnostic information to perform enhanced and automated manufacturing functions (col. 2, lines 25-28).

17. As per claim 13, Markham teaches as set forth above the step of manually collecting second product specific data from the at least one product and entering the data (pgs. 6-7, par. [0077] and pg. 9, par. [0119]) in the same at least one database that stores the product identifying data, the plant specific data and the first product specific data (pg. 20, par. [0201] and pg. 26, par. [0244] and [0245]).

18. As per claim 18, Markham teaches as set forth above the step of generating at least one report from the product identifying data, the plant specific data, the automatically collected (pg. 8, par. [0096], pg. 9, par. [0116], pg. 20-21, par. [0206]-[0207] and pg. 23-24, par. [0226] and [0228]) first product specific data, and the second product specific data stored in the same at least one database (pgs. 26-27, par [0251]-[0253]).

19. As per claim 19, Markham teaches as set forth above the step of enabling at least one user to access the at least one database in order to track the at least one product through at least one step of the at least one manufacturing sub-process (pgs. 26-27, par. [0251]-[0253]).

20. Claims 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Markham in view of Harding in further view of Spriggs.

21. As per claim 14, Markham teaches the step of setting at least one specification for the first product specific data (pg. 17, par. [0183]).

Markham does not expressly teach the step of setting at least one range of specifications.

Harding does not expressly teach the step of setting at least one range of specifications.

Spriggs teaches the step of setting at least one range of specifications (col. 10, lines 1-2 and 22-30).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Markham in view of Harding to include step of setting at least one range of specifications to reduce operating costs, provide fewer and less severe failures and better production availability (col. 1, lines 35-46 and col. 2, lines 27-38).

22. As per claim 15, Markham teaches a method substantially the same as claimed but does not expressly teach the step of notifying the user in real time when the first product specific data falls outside the at least one range of specifications (pg. 20, par. [0206] and pgs. 23-24, par. [0206] and [0208]).

Harding does not expressly teach the step of notifying the user in real time when the first product specific data falls outside the at least one range of specifications.

Spriggs teaches to the user in real time (col. 9, lines 14-21) when the first product specific data falls outside the at least one range of specifications (col. 10, lines 23-49 and col. 11, lines 1-12).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Markham in view of Harding to include the user in real time when the first product specific data falls outside the at

least one range of specifications to reduce operating costs, provide fewer and less severe failures and better production availability (col. 1, lines 35-46 and col. 2, lines 27-38).

23. As per claim 16, Markham teaches to the step of setting at least one alarm (pg. 5, par. [0058] and pg. 6, par. [0064]).

Markham does not expressly teach the step of setting at least one alarm within the at least one range of specifications.

Harding does not expressly teach the step of setting at least one alarm within the at least one range of specifications.

Spriggs teaches the step of setting at least one alarm within the at least one range of specifications (col. 10, lines 1-2 and 22-30).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Markham in view of Harding to include the step of setting at least one alarm within the at least one range of specifications to reduce operating costs, provide fewer and less severe failures and better production availability (col. 1, lines 35-46 and col. 2, lines 27-38).

24. As per claim 17, Markham teaches as set forth above the step of notifying the user in real time when the first product specific data triggers the alarm (pg. 6, par. [0064], pgs. 19-20, par. [0200] and [0203] and pgs. 30-31, par. [0280]).

Response to Arguments

25. Applicant's arguments see Remarks pgs. 2-5, filed 07 October 2008 with respect to claims 1-6, 9-20 and 25 under 35 U.S.C. 103(a) have been fully considered but they are not persuasive.

26. Applicant argues that the prior art fails to teach, "the steps of setting both at least one alarm and at least one specification for the product as claimed in method claims 1-6 and 16-17, the steps of setting at least one range of specifications, at least one range of alarms for the at least one product as claimed in method claim 20 and 25, or the steps of notifying at least one user in real time when product data falls outside of the alarms and/or specification, as claimed in claims 1-6, 16-17, 20 and 25." The Examiner respectfully disagrees.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

27. With respect to the Applicant's arguments, "Spriggs' measurement of when asset or equipment needs maintenance is unrelated to Markham's threshold of waste or delay in the system." The Examiner respectfully disagrees.

The Examiner has interpreted this statement as an argument the prior art of Spriggs and Markham are directed towards nonanalogous art.

In response to applicant's argument that Spriggs and Markham is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, both Spriggs and Markham are both directed to the art of event based systems.

28. Applicant argues that the prior art fails to teach, "automatically collecting and storing product specific data at regular time intervals." The Examiner respectfully disagrees.

In regards to Applicant's argument that Markham, Spriggs, and Harding does not disclose, "automatically collecting and storing product specific data at regular time intervals" (see Remarks pg. 4), the Examiner recognizes the Applicant has not accounted for the combination of Markham, Spriggs, and Harding under 35 U.S.C

103(a) for this limitation as set forth in the Non-Office Action, mailed on 07 April 2008.

Furthermore, Harding teaches "This data is then fed to the controller 652 (or alternatively merely the rotation count is sent to the controller 652 and the controller makes the calculation via its internal programming) and the amount of paper used is then displayed on the display 656 and/or downloaded into the memory 660 or 662, preferably at predetermined time intervals. These time intervals may be, for example, every five minutes, every thirty minutes, each hour, or each day." (col. 25, lines 52-60).

29. In summary, claims 1-6, 9-20 and 25 stand rejected under 35 U.S.C. 103(a) as set forth above.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer L. Norton whose telephone number is (571)272-3694. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on 571-272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Albert DeCady/
Supervisory Patent Examiner
Art Unit 2121